

## APPENDIX B

## FINAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act (RFA),<sup>484</sup> an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rulemaking* in WT Docket Nos. 02-381, 01-14, and 03-202, released October 6, 2003 (*Rural NPRM*).<sup>485</sup> The Commission sought written public comment on the proposals in the *Rural NPRM*, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.<sup>486</sup>

**A. Need for, and Objectives of, the *Report and Order***

This *Report and Order* adopts several measures, as indicated below, intended to increase the ability of wireless service providers to use licensed spectrum resources flexibly and efficiently to offer a variety of services in a cost-effective manner. The Commission takes steps to promote access to spectrum and facilitate capital formation for entities seeking to serve rural areas or improve service in rural areas.<sup>487</sup> We expect that these decisions will facilitate the deployment of new and advanced wireless services, including broadband services, and thereby foster much-needed economic development.

Definition of "rural area". This *Report and Order* establishes the presumption that, unless otherwise specified in the context of specific policies or regulations governing wireless communications services, counties with a population density of 100 persons or less per square mile constitute "rural areas" for purposes of the Commission's wireless spectrum policies.

Size of geographic service areas and re-licensing issues. The *Report and Order* examines Commission policies affecting access to spectrum and the provision of service in rural areas. In particular, the Commission considers its policies governing the licensing of spectrum, both with respect to initial licensing through the competitive bidding process, as well as subsequent re-licensing after an authorization is returned to the Commission. Specifically, the *Report and Order* affirms that the Commission will continue to establish licensing areas on a service-by-service (or band-by-band) basis as appropriate, based upon the flexibility that such an approach provides and our past experience in determining the initial size of service areas. The Commission also reaffirms that when developing rules for licensing individual services in the future, it will consider using smaller service areas in some spectrum blocks to encourage deployment in rural areas for the service in question.

---

<sup>484</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>485</sup> Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, *Notice of Proposed Rulemaking*, 16 FCC Rcd 11169 (2001) (*Rural NPRM*).

<sup>486</sup> See 5 U.S.C. § 604.

<sup>487</sup> This *Report and Order* takes action affecting the provision of commercial and private terrestrial wireless services. While the policies and regulations discussed herein are targeted to promote wireless services in rural areas, we note that certain of our actions will likely have broader application to non-rural areas as well.

Cellular cross-interest rule and conditional security interests to RUS. The Commission also takes the following steps to facilitate increased access to capital for rural licensees. The *Report and Order* eliminates the remaining components of the cellular cross-interest rule that currently apply only in Rural Service Area (RSA) markets and transitions to case-by-case review for cellular transactions, while closely examining those that present a significant likelihood of substantial competitive harm in a market.<sup>488</sup> The Commission also revises the policies governing security interests in wireless licenses by permitting licensees, at their discretion, to grant such interests to the Department of Agriculture's Rural Utilities Service (RUS).

Increase of power limits for certain services. The *Report and Order* amends the Commission's regulations to increase permissible power levels for base stations in certain wireless services that are located in rural areas or that provide coverage to otherwise unserved areas.<sup>489</sup> In doing so, the Commission anticipates that coverage of such areas will be more economical, as licensees may provide increased coverage of rural areas using fewer base stations and less associated infrastructure. The Commission believes these actions will increase licensee flexibility and permit more cost-effective coverage of rural areas.

Substantial service construction requirement. The Commission also amends its regulations to permit certain geographic-area licensees to provide substantial service as a means of complying with their construction requirements, thus countering existing disincentives to build out less densely populated areas.<sup>490</sup>

Infrastructure sharing. Finally, the *Report and Order* concludes that the revised *de facto* control standard for spectrum leasing adopted in the Commission's *Secondary Markets* proceeding generally shall apply for interpreting whether a licensee retains *de facto* control for purposes of Section 310(d) of the Communications Act when it is engaged in an infrastructure sharing arrangement.<sup>491</sup>

#### **B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA**

We received no comments in response to the IRFA. However, as described in section E. below, we have nonetheless considered potential significant economic impacts of our actions on small entities.

#### **C. Description and Estimate of the Number of Small Entities to which the Rules Will Apply**

The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.<sup>492</sup> The RFA generally

---

<sup>488</sup> See *supra* ¶¶ 63-72.

<sup>489</sup> See *supra* ¶¶ 86-104.

<sup>490</sup> See *supra* ¶¶ 75-84.

<sup>491</sup> See *supra* ¶¶ 112-124.

<sup>492</sup> 5 U.S.C. § 603(b)(3).

defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”<sup>493</sup> In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.<sup>494</sup> A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).<sup>495</sup>

**Cellular Licensees.** The SBA has developed a small business size standard for small businesses in the category “Cellular and Other Wireless Telecommunications.”<sup>496</sup> Under that SBA category, a business is small if it has 1,500 or fewer employees.<sup>497</sup> According to the Bureau of the Census, only twelve firms out of a total of 1,238 cellular and other wireless telecommunications firms operating during 1997 had 1,000 or more employees.<sup>498</sup> Therefore, even if all 12 of these firms were cellular telephone companies, nearly all cellular carriers are small businesses under the SBA’s definition.

**220 MHz Radio Service – Phase I Licensees.** The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to “Cellular and Other Wireless Telecommunications” companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.<sup>499</sup> According to the Census Bureau data for 1997, only 12 firms out of a total of 1,238 such firms that operated for the entire year, had 1,000 or more employees.<sup>500</sup> If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA’s small business standard.

---

<sup>493</sup> *Id.* § 601(6).

<sup>494</sup> *Id.* § 601(3) (incorporating by reference the definition of “small business concern” in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

<sup>495</sup> 15 U.S.C. § 632.

<sup>496</sup> 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517212.

<sup>497</sup> *Id.*

<sup>498</sup> U.S. Census Bureau, 1997 Economic Census, Information – Subject Series, Establishment and Firm Size, Table 5 (Employment Size of Firms Subject to Federal Income Tax), NAICS code 517212 (2002). The Census Bureau will be issuing 2002 Economic Census data relating to telecommunications entities in late 2004.

<sup>499</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>500</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, Establishment and Firm Size (Including Legal Form Organization), Table 5, NAICS code 517212 (2002).

**220 MHz Radio Service – Phase II Licensees.** The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for defining “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>501</sup> This small business standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>502</sup> A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.<sup>503</sup> The SBA has approved these small size standards.<sup>504</sup> Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.<sup>505</sup> In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.<sup>506</sup> Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.<sup>507</sup> A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.<sup>508</sup>

**Lower 700 MHz Band Licenses.** We adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.<sup>509</sup> We have defined a small business as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.<sup>510</sup> A very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.<sup>511</sup> Additionally, the lower 700

<sup>501</sup> Amendment of Part 90 of the Commission’s Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶¶ 291-295 (1997).

<sup>502</sup> *Id.* at 11068 ¶ 291.

<sup>503</sup> *Id.*

<sup>504</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>505</sup> See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

<sup>506</sup> See “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” *Public Notice*, 14 FCC Rcd 1085 (WTB 1999).

<sup>507</sup> See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

<sup>508</sup> See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

<sup>509</sup> See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022 (2002).

<sup>510</sup> *Id.* at 1087-88 ¶ 172.

<sup>511</sup> *Id.*

MHz Service has a third category of small business status that may be claimed for Metropolitan/Rural Service Area (MSA/RSA) licenses. The third category is entrepreneur, which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.<sup>512</sup> The SBA has approved these small size standards.<sup>513</sup> An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six EAGs) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.<sup>514</sup> A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 CMA licenses.<sup>515</sup> Seventeen winning bidders claimed small or very small business status and won sixty licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.<sup>516</sup>

**Upper 700 MHz Band Licenses.** The Commission released a *Report and Order* authorizing service in the upper 700 MHz band.<sup>517</sup> This auction, previously scheduled for January 13, 2003, has been postponed.<sup>518</sup>

**Paging.** In the *Paging Second Report and Order*, we adopted a size standard for “small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>519</sup> A small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>520</sup> The SBA has approved this definition.<sup>521</sup> An auction of Metropolitan Economic Area (MEA) licenses commenced on

---

<sup>512</sup> *Id.* at 1088 ¶ 173.

<sup>513</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

<sup>514</sup> See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

<sup>515</sup> See “Lower 700 MHz Band Auction Closes,” *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

<sup>516</sup> *Id.*

<sup>517</sup> Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, *Second Memorandum Opinion and Order*, 16 FCC Rcd 1239 (2001).

<sup>518</sup> See “Auction of Licenses for 747-762 and 777-792 MHz Bands (Auction No. 31) Is Rescheduled,” *Public Notice*, 16 FCC Rcd 13079 (WTB 2003).

<sup>519</sup> Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Second Report and Order*, 12 FCC Rcd 2732, 2811-2812 ¶¶ 178-181 (*Paging Second Report and Order*); see also Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd 10030, 10085-10088 ¶¶ 98-107 (1999).

<sup>520</sup> *Paging Second Report and Order*, 12 FCC Rcd at 2811 ¶ 179.

<sup>521</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold.<sup>522</sup> Fifty-seven companies claiming small business status won 440 licenses.<sup>523</sup> An auction of Metropolitan Economic Area (MEA) and EA licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.<sup>524</sup> One-hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.<sup>525</sup> Currently, there are approximately 24,000 Private Paging site-specific licenses and 74,000 Common Carrier Paging licenses. According to the most recent *Trends in Telephone Service*, 608 private and common carriers reported that they were engaged in the provision of either paging or “other mobile” services.<sup>526</sup> Of these we estimate that 589 are small, under the SBA-approved small business size standard.<sup>527</sup> We estimate that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

**Broadband Personal Communications Service (PCS).** The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>528</sup> For Block F, an additional small business size standard for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>529</sup> These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.<sup>530</sup> No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 “small” and “very small” business bidders won

---

<sup>522</sup> See “929 and 931 MHz Paging Auction Closes,” *Public Notice*, 15 FCC Rcd 4858 (WTB 2000).

<sup>523</sup> See *id.*

<sup>524</sup> See “Lower and Upper Paging Band Auction Closes,” *Public Notice*, 16 FCC Rcd 21821 (WTB 2002).

<sup>525</sup> See “Lower and Upper Paging Bands Auction Closes,” *Public Notice*, 18 FCC Rcd 11154 (WTB 2003).

<sup>526</sup> See *Trends in Telephone Service*, Industry Analysis Division, Wireline Competition Bureau, Table 5.3 (Number of Telecommunications Service Providers that are Small Businesses) (May 2002).

<sup>527</sup> 13 C.F.R. § 121.201, NAICS code 517211.

<sup>528</sup> See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

<sup>529</sup> See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶ 60.

<sup>530</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.<sup>531</sup> On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.<sup>532</sup>

**Narrowband PCS.** The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, “small businesses” were entities with average gross revenues for the prior three calendar years of \$40 million or less.<sup>533</sup> Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.<sup>534</sup> To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.<sup>535</sup> A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.<sup>536</sup> A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.<sup>537</sup> The SBA has approved these small business size standards.<sup>538</sup> A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (MTA and nationwide) licenses.<sup>539</sup> Three of these claimed status as a small or very small entity and won 311 licenses. A fourth auction commenced on September 24, 2003 and closed on September 29, 2003. Here, four bidders won 48 licenses. Four of these claimed status as a very small entity and won 48 licenses.<sup>540</sup> Finally, a fifth auction commenced on September 24, 2003 and closed on September 25, 2003. Here, one bidder won five licenses.<sup>541</sup> That bidder claimed status as a

<sup>531</sup> FCC News, “Broadband PCS, D, E and F Block Auction Closes,” No. 71744 (rel. January 14, 1997).

<sup>532</sup> See “C, D, E, and F Block Broadband PCS Auction Closes,” *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

<sup>533</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, *Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 175, 196 ¶ 46 (1994).

<sup>534</sup> See “Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674,” *Public Notice*, PNWL 94-004 (rel. Aug. 2, 1994); “Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787,” *Public Notice*, PNWL 94-27 (rel. Nov. 9, 1994).

<sup>535</sup> Amendment of the Commission’s Rules to Establish New Personal Communications Services, Narrowband PCS, *Second Report and Order and Second Further Notice of Proposed Rule Making*, 15 FCC Rcd 10456, 10476 ¶ 40 (2000).

<sup>536</sup> *Id.*

<sup>537</sup> *Id.*

<sup>538</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>539</sup> See “Narrowband PCS Auction Closes,” *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

<sup>540</sup> See “Narrowband PCS Spectrum Auction Closes,” *Public Notice*, 18 FCC Rcd 19751 (WTB 2003).

very small entity.

**Specialized Mobile Radio (SMR).** The Commission awards “small entity” bidding credits in auctions for SMR geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.<sup>542</sup> The Commission awards “very small entity” bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.<sup>543</sup> The SBA has approved these small business size standards for the 900 MHz Service.<sup>544</sup> The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.<sup>545</sup> A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.<sup>546</sup>

The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed “small business” status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. We assume, for purposes of this analysis, that all of the remaining existing extended

---

(Continued from previous page)

<sup>541</sup> See “Regional Narrowband PCS Spectrum Auction Closes,” *Public Notice*, 18 FCC Rcd 19689 (WTB 2003).

<sup>542</sup> 47 C.F.R. § 90.814(b)(1).

<sup>543</sup> *Id.*

<sup>544</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999. We note that, although a request was also sent to the SBA requesting approval for the small business size standard for 800 MHz, approval is still pending.

<sup>545</sup> See “Correction to Public Notice DA 96-586 ‘FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,’” *Public Notice*, 18 FCC Rcd 18367 (WTB 1996).

<sup>546</sup> See “Multi-Radio Service Auction Closes,” *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

implementation authorizations are held by small entities, as that small business size standard is established by the SBA.

**Private Land Mobile Radio (PLMR).** PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories, and are often used in support of the licensee's primary (non-telecommunications) business operations. For the purpose of determining whether a licensee of a PLMR system is a small business as defined by the SBA, we could use the definition for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any such entity employing no more than 1,500 persons.<sup>547</sup> The Commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. Moreover, because PLMR licensees generally are not in the business of providing cellular or other wireless telecommunications services but instead use the licensed facilities in support of other business activities, we are not certain that the Cellular and Other Wireless Telecommunications category is appropriate for determining how many PLMR licensees are small entities for this analysis. Rather, it may be more appropriate to assess PLMR licensees under the standards applied to the particular industry subsector to which the licensee belongs.<sup>548</sup>

The Commission's 1994 Annual Report on PLMRs<sup>549</sup> indicates that at the end of fiscal year 1994, there were 1,087,267 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz. Because any entity engaged in a commercial activity is eligible to hold a PLMR license, the revised rules in this context could potentially impact every small business in the United States.

**Fixed Microwave Services.** Fixed microwave services include common carrier,<sup>550</sup> private-operational fixed,<sup>551</sup> and broadcast auxiliary radio services.<sup>552</sup> Currently, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of this FRFA, we will use the SBA's definition applicable to "Cellular and Other Wireless Telecommunications" companies – that is, an entity with no more than

---

<sup>547</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>548</sup> See generally 13 C.F.R. § 121.201.

<sup>549</sup> Federal Communications Commission, 60th Annual Report, Fiscal Year 1994, at ¶ 116.

<sup>550</sup> 47 C.F.R. §§ 101 *et seq.* (formerly, part 21 of the Commission's Rules).

<sup>551</sup> Persons eligible under parts 80 and 90 of the Commission's rules can use Private Operational-Fixed Microwave services. See generally 47 C.F.R. parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

<sup>552</sup> Auxiliary Microwave Service is governed by part 74 of Title 47 of the Commission's Rules. See 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

1,500 persons.<sup>553</sup> The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer small common carrier fixed licensees and 61,670 or fewer small private operational-fixed licensees and small broadcast auxiliary radio licensees in the microwave services that may be affected by the rules and policies adopted herein. The Commission notes, however, that the common carrier microwave fixed licensee category includes some large entities.

**Wireless Communications Services.** This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years.<sup>554</sup> The SBA has approved these definitions.<sup>555</sup> The FCC auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity. An auction for one license in the 1670-1674 MHz band commenced on April 30, 2003 and closed the same day. One license was awarded. The winning bidder was not a small entity.

**39 GHz Service.** The Commission defines "small entity" for 39 GHz licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>556</sup> "Very small business" is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>557</sup> The SBA has approved these definitions.<sup>558</sup> The auction of the 2,173 39 GHz licenses began on April 12, 2000, and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses.

**Local Multipoint Distribution Service.** An auction of the 986 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined "small entity" for LMDS licenses as an entity that has average gross revenues of less than \$40 million in

---

<sup>553</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>554</sup> Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

<sup>555</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>556</sup> See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Band, *Report and Order*, 12 FCC Rcd 18600 (1997).

<sup>557</sup> *Id.*

<sup>558</sup> See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Hector Barreto, Administrator, Small Business Administration, dated January 18, 2002.

the three previous calendar years.<sup>559</sup> An additional classification for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>560</sup> These regulations defining “small entity” in the context of LMDS auctions have been approved by the SBA.<sup>561</sup> There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small business winning bidders that won 119 licenses.

**218-219 MHz Service.** The first auction of 218-219 MHz (previously referred to as the Interactive and Video Data Service or IVDS) spectrum resulted in 178 entities winning licenses for 594 Metropolitan Statistical Areas (MSAs).<sup>562</sup> Of the 594 licenses, 567 were won by 167 entities qualifying as a small business. For that auction, we defined a small business as an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.<sup>563</sup> In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not exceeding \$15 million for the preceding three years.<sup>564</sup> A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not exceeding \$3 million for the preceding three years.<sup>565</sup> The SBA has approved of these definitions.<sup>566</sup> At this time, we cannot estimate the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this FRFA that in future auctions, many, and perhaps all, of the licenses may be awarded to small businesses.

---

<sup>559</sup> See Rulemaking to Amend Parts 1, 2, 21, 25, of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, Reallocate the 29.5-30.5 Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making*, 12 FCC Rcd 12545, 12689-90 ¶ 348 (1997).

<sup>560</sup> *Id.*

<sup>561</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>562</sup> See “Interactive Video and Data Service (IVDS) Applications Accepted for Filing,” *Public Notice*, 9 FCC Rcd 6227 (1994).

<sup>563</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Fourth Report and Order*, 9 FCC Rcd 2330 (1994).

<sup>564</sup> Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Report and Order and Memorandum Opinion and Order*, 15 FCC Rcd 1497 (1999).

<sup>565</sup> *Id.*

<sup>566</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

**Location and Monitoring Service (LMS).** Multilateration LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning LMS licenses, the Commission has defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.<sup>567</sup> A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$3 million.<sup>568</sup> These definitions have been approved by the SBA.<sup>569</sup> An auction for LMS licenses commenced on February 23, 1999, and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses. We cannot accurately predict the number of remaining licenses that could be awarded to small entities in future LMS auctions.

**Rural Radiotelephone Service.** We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.<sup>570</sup> There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

**Air-Ground Radiotelephone Service.** We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.<sup>571</sup> There are approximately 10 licensees in the Air-Ground Radiotelephone Service, and the Commission estimates that almost all of them qualify as small entities under the SBA definition.

**Offshore Radiotelephone Service.** This service operates on several ultra high frequency (UHF) TV broadcast channels that are not used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico. At present, there are approximately 55 licensees in this service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.<sup>572</sup> The Commission is unable at this time to estimate the number of licensees that would qualify as small entities under the SBA definition. The Commission assumes, for purposes of this FRFA, that all of the 55 licensees are small entities, as that term is defined by the SBA.

**Multiple Address Systems (MAS).** Entities using MAS spectrum, in general, fall into two categories: (1) those using the spectrum for profit-based uses, and (2) those using the spectrum for private internal uses. With respect to the first category, the Commission defines "small entity" for MAS licenses as an

---

<sup>567</sup> Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Second Report and Order*, 13 FCC Rcd 15182, 15192 ¶ 20 (1998); *see also* 47 C.F.R. § 90.1103.

<sup>568</sup> *Id.*; *see also* 47 C.F.R. § 90.1103.

<sup>569</sup> *See* Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated February 22, 1999.

<sup>570</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>571</sup> *Id.*

<sup>572</sup> *Id.*

entity that has average gross revenues of less than \$15 million in the three previous calendar years.<sup>573</sup> "Very small business" is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$3 million for the preceding three calendar years.<sup>574</sup> The SBA has approved of these definitions.<sup>575</sup> The majority of these entities will most likely be licensed in bands where the Commission has implemented a geographic area licensing approach that would require the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission's licensing database indicates that, as of January 20, 1999, there were a total of 8,670 MAS station authorizations. Of these, 260 authorizations were associated with common carrier service. In addition, an auction for 5,104 MAS licenses in 176 EAs began November 14, 2001, and closed on November 27, 2001.<sup>576</sup> Seven winning bidders claimed status as small or very small businesses and won 611 licenses.

With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, we note that MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definitions developed by the SBA would be more appropriate. The applicable definition of small entity in this instance appears to be the "Cellular and Other Wireless Telecommunications" definition under the SBA rules. This definition provides that a small entity is any entity employing no more than 1,500 persons.<sup>577</sup> The Commission's licensing database indicates that, as of January 20, 1999, of the 8,670 total MAS station authorizations, 8,410 authorizations were for private radio service, and of these, 1,433 were for private land mobile radio service.

**Incumbent 24 GHz Licensees.** The rules that we adopt could affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The Commission did not develop a definition of small entities applicable to existing licensees in the 24 GHz band. Therefore, the applicable definition of small entity is the definition under the SBA rules for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any entity employing no more than 1,500 persons.<sup>578</sup> The 1992 Census of Transportation, Communications and Utilities, conducted by the Bureau of the Census, which is the most recent information available, shows that only 12 radiotelephone (now Wireless) firms out of a total of 1,178 such firms that operated during 1992 had 1,000 or more employees.<sup>579</sup> This information notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz

---

<sup>573</sup> See Amendment of the Commission's Rules Regarding Multiple Address Systems, *Report and Order*, 15 FCC Rcd 11956, 12008 ¶ 123 (2000).

<sup>574</sup> *Id.*

<sup>575</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated June 4, 1999.

<sup>576</sup> See "Multiple Address Systems Spectrum Auction Closes," *Public Notice*, 16 FCC Rcd 21011 (2001).

<sup>577</sup> See 13 C.F.R. § 121.201, NAICS code 517212.

<sup>578</sup> See *id.*

<sup>579</sup> 1992 Census, Series UC-92-S-1 at Firm Size 1-123.

band: Teligent<sup>580</sup> and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

**Future 24 GHz Licensees.** With respect to new applicants in the 24 GHz band, we have defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not exceeding \$15 million.<sup>581</sup> “Very small business” in the 24 GHz band is defined as an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.<sup>582</sup> The SBA has approved these definitions.<sup>583</sup> The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held.

**700 MHz Guard Band Licenses.** In the 700 MHz Guard Band Order, we adopted a small business size standard for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>584</sup> A “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. An auction of 52 MEA licenses commenced on September 6, 2000, and closed on September 21, 2000. Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.<sup>585</sup>

In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution,<sup>586</sup> which includes all such companies generating \$12.5 million or less in annual receipts.<sup>587</sup>

---

<sup>580</sup> Teligent acquired the Digital Electronic Message Service (DEMS) licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

<sup>581</sup> Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules To License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16967 ¶ 77 (2000) (*24 GHz Report and Order*); see also 47 C.F.R. § 101.538(a)(2).

<sup>582</sup> *24 GHz Report and Order*, 15 FCC Rcd at 16967 ¶ 77; see also 47 C.F.R. § 101.538(a)(1).

<sup>583</sup> See Letter to Margaret Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Gary Jackson, Assistant Administrator, Small Business Administration, dated July 28, 2000.

<sup>584</sup> See Service Rules for the 746-764 MHz Bands, and Revisions to part 27 of the Commission’s Rules, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299 (2000), 65 FR 17599 (Apr. 4, 2000).

<sup>585</sup> Public Notice, “700 MHz Guard Band Auction Closes,” DA 01-478 (rel. Feb. 22, 2001).

<sup>586</sup> 13 C.F.R. § 121.201, NAICS code 517510.

<sup>587</sup> *Id.*

According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.<sup>588</sup> Of this total, 1,180 firms had annual receipts of under \$10 million, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.<sup>589</sup> Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies proposed in the *Rural NPRM*.

#### **D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements**

With respect to the cellular cross-interest rule, in the event that a party with a controlling or otherwise attributable interest in one cellular licensee within an RSA obtains a non-controlling interest of more than 10 percent in the other cellular carrier, the Commission will require that the cellular licensee file a notification with the Commission that will include updated ownership information (FCC Form 602) to reflect this investment. This notification requirement will sunset at the earlier of: (1) five years after the release of this item, or (2) at the cellular licensee's specific renewal deadline.

#### **E. Steps Taken To Minimize Significant Economic Impact On Small Entities, And Significant Alternatives Considered**

The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>590</sup>

The *Report and Order* adopts several measures intended to increase the ability of wireless service providers to use licensed spectrum resources flexibly and efficiently to offer a variety of services in a cost-effective manner. The Commission also takes steps to promote access to spectrum and facilitate capital formation for entities, including small entities, seeking to serve rural areas or improve service in rural areas.<sup>591</sup> As explained *infra*, the actions set forth in this *Order* are consistent with the RFA. Given that many carriers serving or seeking to serve rural areas may be considered small entities for FRFA purposes, the steps taken in the *Report and Order* will aid such entities.

**Definition of "rural area".** The *Report and Order* establishes a baseline definition of "rural area" that includes those counties (or the equivalent) with a population density of 100 persons or less per

---

<sup>588</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4 (issued October 2000).

<sup>589</sup> *Id.*

<sup>590</sup> See 5 U.S.C. § 603(c)(1)-(c)(4).

<sup>591</sup> This *Report and Order* takes action affecting the provision of commercial and private terrestrial wireless services. While the policies and regulations discussed herein are targeted to promote wireless services in rural areas, we note that certain of our action will likely have broader application to non-rural areas as well.

square mile. While some commenters supported alternative plans such as defining “rural areas” as any area within an RSA or refraining from adopting new definitions at all, the Commission rejected these alternatives because it believes its county- and population-based definition provides an appropriate practical guideline for carriers, including carriers qualifying as small entities, that serve or seek to serve rural areas. The Commission believes the “100 persons or less” definition best serves the Commission’s goals both in ease of the definition’s administration and its foundation in widely available population data. Further, by treating the designation not as a uniform definition but rather as a presumption that will apply only to Commission proceedings for which the term “rural area” has not been expressly defined, the Commission can maintain continuity and avoid confusion with respect to definitions of “rural” already in existence for specific policies.

Size of geographic service areas. The *Report and Order* concludes that maintaining the flexibility to establish geographic areas on a service-by-service basis and promoting the use of a variety of service areas, including small areas such as MSAs/RSAs, are in the public interest. Some commenters made an alternative proposal that the Commission should mandate that small markets such as RSAs are available in every future auction in order to ensure that small carriers are able to acquire licenses at auction. The Commission also received a variety of suggestions from commenters on the appropriate size of geographic areas, ranging from a belief that all licenses should be based on MSAs/RSAs to the recommendation of even smaller areas based on counties. The Commission rejects those alternatives, concluding that service area size should not be determined by a bright-line rule as commenters suggested but rather on service-by-service basis so that the Commission can evaluate all factors relevant to the types of spectrum being licensed.

When determining the scope of geographic licenses, the Commission generally considers a number of factors, including the size for each area or areas that will be licensed; the amount of spectrum to be available under each license and whether there should be paired spectrum blocks available for auction. The Commission has designated various sizes of geographic service areas, including smaller market sizes, in order to encourage participation in spectrum auctions and to facilitate deployment of wireless services.<sup>592</sup> The Commission’s service-specific approach ensures flexibility while providing an opportunity for spectrum to be made available over small areas such as MSAs or RSAs depending on the record and other considerations relevant to the specific spectrum. This in turn increases the likelihood of service to rural markets by all carriers, including small entities.

Re-licensing issues. In the *Report and Order*, the Commission concludes that because secondary markets rules and policies are aimed at improving access to spectrum in an efficient manner for all carriers, including small entities, the Commission would not revise any of its specific re-licensing policies at this time. Before reaching this conclusion, the Commission sought comment on when, and under what circumstances, the Commission should apply re-licensing provisions to prospective spectrum designations in order to evaluate mechanisms that it could employ in the future that would potentially increase service by making spectrum available to those seeking to serve a given area, particularly if the area is rural in nature. The Commission sought comment on a number of different re-licensing mechanisms that could result in increased access to spectrum, including a “keep what you use” approach, a “complete forfeiture” approach, and geographic overlays.<sup>593</sup> In reaching its decision, the Commission

---

<sup>592</sup> See e.g., *Lower 700 MHz Report and Order*, 17 FCC Rcd at 1058-62 ¶¶ 89-96 (adopting a combination of large regional areas and small geographic areas based on record).

<sup>593</sup> See *supra* ¶¶ 32-36.

fully considered but rejected, at this time, the “keep what you use” re-licensing approach in the context of future band designations. The Commission indicated that, after being given time to mature and take effect, if the secondary markets rules and policies do not provide sufficient incentives to increase spectrum access in rural areas, the Commission would support future consideration of “keep what you use” approaches in the context of specific service rulemakings for new licensed services.

Cellular cross-interest rule. The *Report and Order* eliminates the remaining components of the cellular cross-interest rule that currently apply only in RSAs and transitions to case-by-case review for cellular transactions. To facilitate additional access to capital by cellular carriers in rural areas, the Commission, before adopting this new rule, sought comment regarding whether the prohibition against cellular cross-interests in all RSAs remains in the public interest and whether the current cross-interest rule should be retained in RSAs with three or fewer CMRS competitors. Alternatively, the Commission sought comment on whether to eliminate the prohibition for all RSAs where the ownership interest being obtained is not a controlling interest (*i.e.*, where the interest is a non-controlling interest and where the transaction otherwise would not require prior FCC approval). The Commission, however, rejected these alternatives and found that elimination of the cellular cross-interest rule and reliance on a uniform case-by-case review process for all aggregations of spectrum and potentially anticompetitive cellular cross-interests in RSAs is currently the better approach as compared to the old, prophylactic limits. The Commission believes that modification of the rule is necessary to better encourage more transactions and levels of financing that are in the public interest while still maintaining much of the protection afforded by the cellular cross-interest rule. The *Report and Order* agreed with commenters that the approach limiting cross-interests in RSAs, as well as the proposal to eliminate the rule only in counties with more than three competitors, may interfere with investment in rural areas by discouraging certain financing in the RSA portions of a regional market but not in the MSA portions. The Commission believes that elimination of the cellular cross-interest rule will provide greater flexibility to all carriers, including small entities.

Conditional security interests to RUS. In this *Report and Order*, the Commission relaxes its security interest policy to permit commercial and private wireless, terrestrial-based licensees to grant RUS a conditional security interest in their FCC licenses.<sup>594</sup> The Commission believes this action will significantly increase the financing opportunities for all licensees, including those classified as small entities, by increasing the value of their available collateral. Although one commenter suggested in the alternative that permitting RUS to obtain a security interest in an FCC license would make the RUS lending process more onerous, the Commission rejected this idea and believes that its new policy will enhance RUS loan opportunities. The Commission believes that allowing FCC licenses to be used as collateral will serve the public interest by facilitating licensees’ access to capital. In doing so, the policy will provide increased flexibility for all licensees, including small entities, seeking to expand into rural areas.

Increase of power limits for certain services. The Commission amends its regulations to increase cellular, PCS, and AWS power limits in rural areas as a means of encouraging service to these areas. In doing so, the Commission evaluated the technical and operations rules for the various services at issue and found that increasing power limits may provide measurable benefits without creating harmful interference. Although it considered an alternative proposal to adopt such flexibility for other services in addition to cellular, PCS, and AWS, the Commission rejected this alternative due to lack of support in

---

<sup>594</sup> See *id.* at ¶¶ 51-58.

the record. However, licensees in other services may file a request for waiver of service-specific power limits.

**Substantial service construction requirement.** The Commission amends its regulations to provide a substantial service construction benchmark<sup>595</sup> for the following licensees: 30 MHz broadband PCS licensees; 800 MHz SMR licensees (blocks A, B, and C); certain 220 MHz licensees; LMS licensees; and 700 MHz public safety licensees. These licensees now have the option of satisfying their construction requirements by providing substantial service or by complying with other service-specific construction benchmarks already available to them under the Commission's rules.<sup>596</sup> As part of the amendments and in order to provide licensees with guidance, the Commission adopts safe harbors for providing substantial service to rural areas: A licensee will be deemed to have met the substantial service requirement if it provides coverage to at least 75 percent of the geographic area of at least 20 percent of the "rural areas" within its licensed area. With respect to fixed wireless services, the substantial service requirement is met if a licensee constructs at least one end of a permanent link in at least 20 percent of the number of "rural areas" within its licensed area.

The Commission implements this rule change in order to increase licensees' flexibility to develop rural-focused business plans and to allow all licensees, including small entities, to deploy spectrum-based services in more sparsely populated areas without being bound to concrete population or geographic coverage requirements. Certain commenters urged the adoption of a substantial service standard only for those licensees with "small geographic territories." The Commission rejected this alternative, stating that it would only result in focused coverage of populated areas instead of more rural areas. The Commission also rejected proposals for a "very rural area" safe harbor or to modify safe harbors to include a population component. The Commission noted that several commenters proposed as an alternative that a population component be included to make the safe harbor more meaningful for licensees whose licensed areas include counties with large land areas. These commenters argued that in such circumstances, it may be easier for a licensee to satisfy population requirements instead of the substantial service safe harbor. The Commission, in rejecting these alternatives, stated that the safe harbors are not intended to be the only means of providing substantial service, and that it will take into consideration a situation in which a licensee is serving a "very rural area" or a very large geographic area.

**Infrastructure sharing.** In this *Report and Order*, the Commission adopts a more flexible *de facto* control standard when interpreting whether a licensee (or spectrum lessee) retains *de facto* control for purposes of Section 310(d) when engaging in an infrastructure sharing arrangement involving facilities only. Although the *Secondary Markets Report and Order* initially set out this policy for the purposes of spectrum sharing only, the Commission believes that extending this policy to infrastructure sharing arrangements will provide the potential for savings in both capital costs for the construction of facilities and for improved coverage in rural areas. The Commission noted that most commenters supported the adoption of this more flexible standard, which they believe will help to alleviate the significant financial barriers small regional entities face when constructing wireless networks. Some commenters, on the other hand, stated their concern with the potential for interference that may result from the collocation of antennas. In rejecting this concern as needless, the Commission pointed out that all parties to

---

<sup>595</sup> See *id.* at ¶¶ 75-84.

<sup>596</sup> See *id.* at ¶ 75.

infrastructure sharing arrangements, including small entities, must continue to comply with the Commission's interference and non-interference related rules and policies.

**F. Report to Congress**

The Commission will send a copy of the *Report and Order*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.<sup>597</sup> In addition, the Commission will send a copy of the *Report and Order*, including the FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Report and Order* and the FRFA (or summaries thereof) will also be published in the Federal Register.<sup>598</sup>

---

<sup>597</sup> See 5 U.S.C. § 801(a)(1)(A).

<sup>598</sup> See 5 U.S.C. § 604(b)

## APPENDIX C

## INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act of 1980, as amended (RFA),<sup>599</sup> the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this *Further Notice of Proposed Rulemaking (Further Notice)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Further Notice* provided in paragraph 183 of the item. The Commission will send a copy of the *Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).<sup>600</sup> In addition, the *Further Notice* and IRFA (or summaries thereof) will be published in the Federal Register.<sup>601</sup>

**A. Need for, and Objectives of, the Proposed Rules.**

In the *Further Notice*, the Commission seeks to expand upon the record received in response to the *Notice of Proposed Rulemaking* in WT Dockets 02-381, 01-14, and 03-202, with respect to additional measures that the Commission can take in order to promote the further expansion of spectrum-based services into rural areas. As the Commission observed in the *Report and Order*, there may be circumstances in which our market-oriented policies lack the ability to foster access to spectrum and deployment of wireless service in rural areas.<sup>602</sup> In situations such as these, therefore, it may be appropriate to impose renewal-term performance requirements for both existing and future licenses in order to continue to encourage the provisioning of wireless service to rural areas.<sup>603</sup> Based on these observations, the *Further Notice* seeks comment in the following areas.

First, the Commission seeks comment on the appropriate mechanism to further ensure that spectrum continues to be put to its highest valued use. Specifically, the *Further Notice* seeks additional comment concerning the effectiveness of the Commission's partitioning, disaggregation, and secondary markets rules as well as other market-based policies and rules in making wireless services available in more rural areas.<sup>604</sup>

Second, the Commission also seeks comment on the potential use of "keep what you use" relicensing mechanisms,<sup>605</sup> renewal term substantial service requirements,<sup>606</sup> and other alternatives such

---

<sup>599</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. § 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

<sup>600</sup> See 5 U.S.C. § 603(a).

<sup>601</sup> See 5 U.S.C. § 603(a).

<sup>602</sup> See *supra* ¶¶ 39-41.

<sup>603</sup> See *supra* ¶ 39.

<sup>604</sup> See *supra* ¶¶ 146-151.

<sup>605</sup> See *supra* ¶¶ 152-158.

as easements<sup>607</sup> to move unused or underused spectrum to those carriers who may be able to use it more intensively. At the same time, the Commission seeks comment on the economic impact of employing the above approaches and whether there are different services that may benefit from a different approach to expanded spectrum access.

**B. Legal Basis.**

The Commission tentatively concludes that it has authority under Sections 4(i), 11, 303(r), 309(j) and 706 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 157, 161, 303(r), and 309(j).

**C. Description and Estimate of the Number of Small Entities to which the Rules Will Apply.**

The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.<sup>608</sup> The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."<sup>609</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>610</sup> A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).<sup>611</sup>

**Cellular Licensees.** The SBA has developed a small business size standard for small businesses in the category "Cellular and Other Wireless Telecommunications."<sup>612</sup> Under that SBA category, a business is small if it has 1,500 or fewer employees.<sup>613</sup> According to the Bureau of the Census, only twelve firms out of a total of 1,238 cellular and other wireless telecommunications firms operating during 1997 had

---

(Continued from previous page)

<sup>606</sup> See *supra* ¶¶ 159-161.

<sup>607</sup> See *supra* ¶¶ 162-163.

<sup>608</sup> 5 U.S.C. § 604(a)(3).

<sup>609</sup> 5 U.S.C. § 601(6).

<sup>610</sup> 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

<sup>611</sup> 15 U.S.C. § 632.

<sup>612</sup> 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517212.

<sup>613</sup> *Id.*

1,000 or more employees.<sup>614</sup> Therefore, even if all 12 of these firms were cellular telephone companies, nearly all cellular carriers are small businesses under the SBA's definition.

**220 MHz Radio Service – Phase I Licensees.** The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to "Cellular and Other Wireless Telecommunications" companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.<sup>615</sup> According to the Census Bureau data for 1997, only 12 firms out of a total of 1,238 such firms that operated for the entire year, had 1,000 or more employees.<sup>616</sup> If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business standard.

**220 MHz Radio Service – Phase II Licensees.** The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for defining "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>617</sup> This small business standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>618</sup> A "very small business" is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.<sup>619</sup> The SBA has approved these small size standards.<sup>620</sup> Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.<sup>621</sup> In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses

<sup>614</sup> U.S. Census Bureau, 1997 Economic Census, Information – Subject Series, Establishment and Firm Size, Table 5 (Employment Size of Firms Subject to Federal Income Tax), NAICS code 517212 (2002). The Census Bureau will be issuing 2002 Economic Census data relating to telecommunications entities in late 2004.

<sup>615</sup> 13 C.F.R. § 121.201, NAICS code 517212.

<sup>616</sup> U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, Establishment and Firm Size (Including Legal Form Organization), Table 5, NAICS code 517212 (2002).

<sup>617</sup> Amendment of Part 90 of the Commission's Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶¶ 291-295 (1997).

<sup>618</sup> *Id.* at 11068 ¶ 291.

<sup>619</sup> *Id.*

<sup>620</sup> See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

<sup>621</sup> See generally "220 MHz Service Auction Closes," *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

auctioned, 693 were sold.<sup>622</sup> Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.<sup>623</sup> A third auction included four licenses: 2 BEA licenses and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.<sup>624</sup>

**Lower 700 MHz Band Licenses.** We adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.<sup>625</sup> We have defined a small business as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.<sup>626</sup> A very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.<sup>627</sup> Additionally, the lower 700 MHz Service has a third category of small business status that may be claimed for Metropolitan/Rural Service Area (MSA/RSA) licenses. The third category is entrepreneur, which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.<sup>628</sup> The SBA has approved these small size standards.<sup>629</sup> An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six EAGs) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.<sup>630</sup> A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 CMA licenses.<sup>631</sup> Seventeen winning bidders claimed small or very small business status and won sixty licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.<sup>632</sup>

---

<sup>622</sup> See "FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made," *Public Notice*, 14 FCC Rcd 1085 (WTB 1999).

<sup>623</sup> See "Phase II 220 MHz Service Spectrum Auction Closes," *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

<sup>624</sup> See "Multi-Radio Service Auction Closes," *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

<sup>625</sup> See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022 (2002).

<sup>626</sup> *Id.* at 1087-88 ¶ 172.

<sup>627</sup> *Id.*

<sup>628</sup> *Id.* at 1088 ¶ 173.

<sup>629</sup> See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

<sup>630</sup> See "Lower 700 MHz Band Auction Closes," *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

<sup>631</sup> See "Lower 700 MHz Band Auction Closes," *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

<sup>632</sup> *Id.*

**Upper 700 MHz Band Licenses.** The Commission released a *Report and Order* authorizing service in the upper 700 MHz band.<sup>633</sup> This auction, previously scheduled for January 13, 2003, has been postponed.<sup>634</sup>

**Paging.** In the *Paging Second Report and Order*, we adopted a size standard for “small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.<sup>635</sup> A small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.<sup>636</sup> The SBA has approved this definition.<sup>637</sup> An auction of Metropolitan Economic Area (MEA) licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold.<sup>638</sup> Fifty-seven companies claiming small business status won 440 licenses.<sup>639</sup> An auction of Metropolitan Economic Area (MEA) and EA licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.<sup>640</sup> One-hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.<sup>641</sup> Currently, there are approximately 24,000 Private Paging site-specific licenses and 74,000 Common Carrier Paging licenses. According to the most recent *Trends in Telephone Service*, 608 private and common carriers reported that they were engaged in the provision of either paging or “other mobile” services.<sup>642</sup> Of these, we estimate that 589 are small, under the SBA-approved small business size standard.<sup>643</sup> We estimate that the majority of private and common carrier paging providers would qualify

<sup>633</sup> Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, *Second Memorandum Opinion and Order*, 16 FCC Rcd 1239 (2001).

<sup>634</sup> See “Auction of Licenses for 747-762 and 777-792 MHz Bands (Auction No. 31) Is Rescheduled,” *Public Notice*, 16 FCC Rcd 13079 (WTB 2003).

<sup>635</sup> Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Second Report and Order*, 12 FCC Rcd 2732, 2811-2812 ¶¶ 178-181 (*Paging Second Report and Order*); see also Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd 10030, 10085-10088 ¶¶ 98-107 (1999).

<sup>636</sup> *Paging Second Report and Order*, 12 FCC Rcd at 2811 ¶ 179.

<sup>637</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>638</sup> See “929 and 931 MHz Paging Auction Closes,” *Public Notice*, 15 FCC Rcd 4858 (WTB 2000).

<sup>639</sup> See *id.*

<sup>640</sup> See “Lower and Upper Paging Band Auction Closes,” *Public Notice*, 16 FCC Rcd 21821 (WTB 2002).

<sup>641</sup> See “Lower and Upper Paging Bands Auction Closes,” *Public Notice*, 18 FCC Rcd 11154 (WTB 2003).

<sup>642</sup> See *Trends in Telephone Service*, Industry Analysis Division, Wireline Competition Bureau, Table 5.3 (Number of Telecommunications Service Providers that are Small Businesses) (May 2002).

<sup>643</sup> 13 C.F.R. § 121.201, NAICS code 517211.

as small entities under the SBA definition.

**Broadband Personal Communications Service (PCS).** The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.<sup>644</sup> For Block F, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.<sup>645</sup> These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.<sup>646</sup> No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 "small" and "very small" business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.<sup>647</sup> On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.<sup>648</sup>

**Narrowband PCS.** The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less.<sup>649</sup> Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.<sup>650</sup> To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the *Narrowband PCS Second Report*

---

<sup>644</sup> See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

<sup>645</sup> See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶ 60.

<sup>646</sup> See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

<sup>647</sup> FCC News, "Broadband PCS, D, E and F Block Auction Closes," No. 71744 (rel. January 14, 1997).

<sup>648</sup> See "C, D, E, and F Block Broadband PCS Auction Closes," *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

<sup>649</sup> Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, *Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 175, 196 ¶ 46 (1994).

<sup>650</sup> See "Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674," *Public Notice*, PNWL 94-004 (rel. Aug. 2, 1994); "Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787," *Public Notice*, PNWL 94-27 (rel. Nov. 9, 1994).